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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/283,192 04/01/99 KURABAYASHI

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005514 IM22/0830  
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EXAMINER

SHOSHQ.C

ART UNIT

PAPER NUMBER

1714

DATE MAILED:

08/30/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.  
09/283,192

Applicant(s)  
Kurabayashi

Examiner  
Calle Shosho

Art Unit  
1714



— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Jun 13, 2001
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-59 is/are pending in the application.
- 4a) Of the above, claim(s) 37-58 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 and 59 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claims 1-59 are subject to restriction and/or election requirements.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 12, 14
- 18) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: \_\_\_\_\_

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**DETAILED ACTION**

**Continued Prosecution Application**

1. The request filed on 6/13/01 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/283,192 is acceptable and a CPA has been established. An action on the CPA follows.

**Election/Restriction**

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
- I. Claims 1-18, drawn to ink composition, classified in class 523, subclass 160.
  - II. Claims 39-44, drawn to ink set, classified in class 106, subclass 31.60.
  - III. Claims 45-52, drawn to image recording process, classified in class 524, subclass 556.
  - IV. Claims 19-38 and 53-58, drawn to ink cartridge, recording unit, and image recording apparatus, classified in class 347, subclass 100.
3. The inventions are distinct, each from the other because:
- (a) Inventions II and I are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not

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require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the ink set does not require a pigment having an anionic group or a dispersant having an anionic group. The subcombination has separate utility such as ink for writing instrument such as ball-point pen.

(b) Inventions I and III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the process can be practiced with another materially different product such as a hot melt ink or an ink comprising dye only or an ink comprising pigment and dispersant each having anionic groups. In addition, the product as claimed can be used in a materially different process of using the product such as gravure or lithographic process.

(c) Inventions IV and I are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant

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case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination does not require that the ink comprise pigment with anionic group or dispersant with anionic group. The subcombination has separate utility such as ink for writing instrument.

(d) Inventions II and III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the process can be practiced with another materially different product such as a single ink, and not an ink set. In addition, the product as claimed can be used in a materially different process of using the product such as gravure or lithographic process.

(e) Inventions IV and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination does not require that the ink comprise specific colors of inks as required in the ink set. Further, the combination does not require that the second ink contain a

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dye containing anionic groups. The subcombination has separate utility such as ink for writing instrument, ink for gravure apparatus, or ink for lithographic apparatus.

(f) Inventions III and IV are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case, the process as claimed can be practiced by another and materially different apparatus, ink cartridge, and recording unit such as one using a continuous feeding means instead of an ink cartridge or an apparatus, ink cartridge, and recording unit such as one using a different means for ejecting the ink from the apparatus such as an acoustic means.

4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and/or have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

5. During a telephone conversation with Jean Dudek on 4/14/00 a provisional election was made with traverse to prosecute the invention of ink composition, Group I, claims 1-18. In the office action mailed 4/20/00, applicant's election of Group I, claims 1-18, ink composition, was

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acknowledged. Following applicant's traverse in Paper No.9 filed 10/20/00, claims 19-36, drawn to ink cartridge, were rejoined with Group I, claims 1-18. Additionally, newly added claims 59-60 were joined with Group I. However, the restriction with respect to the other non-elected claims, i.e. claims 37-58, was maintained and made final.

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).

7. Pursuant to the Official Gazette 1046 TMOG 2 of September 4, 1984, prosecution in this CPA is being continued on the invention elected and prosecuted by the applicant in the parent application, i.e. claims 1-36 and 59-60.

**Claim Rejections - 35 USC § 103**

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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9. Claims 1-6, 8-10, 12-15, 17, 19-24, 26-28, 30-33, 35, and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (U.S. 5,851,274) in view of Sakuma et al. (U.S. 5,877,235).

Lin discloses an aqueous ink composition which contains pigment such as carbon black which is present with or without a dispersant wherein the pigment is dispersed in an aqueous medium. When the carbon black is chemically modified with anionic or cationic functional groups, it is dispersed without a dispersant. If the carbon black is not chemically modified, a dispersant is necessary. The dispersant contains hydrophilic anionic and cationic functional groups (col.11, lines 54-62, col.13, lines 17, and col.14, lines 42-45). Lin also discloses an ink jet ink printed using an ink jet printer (col.5, line 64 and col.6, lines 22-26). An ink jet printer, as is well known to one of ordinary skill in the art, contains cartridges to hold the ink, and therefore would have been obvious to one of ordinary skill in the art that Lin discloses an ink cartridge containing the above described ink. Evidence to support this position is found in col.3, line 20 of Lin which discloses that ink jet printers do indeed utilize cartridges which hold the ink prior to printing.

The difference between Lin and the present claimed invention is the requirement in the claims of a resin encapsulating a coloring material.

Lin discloses that the ink contains mixtures of colorants, but does not explicitly disclose the use of resin encapsulating a coloring material.



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Sakuma et al., which is drawn to aqueous ink compositions, discloses the use of resin encapsulated dye or pigment (col.2, lines 42-46, and col.4, lines 46 and 62-64) in order to produce an ink with improved waterfastness and fixation without impairing the color forming properties of the coloring material (col.1, lines 62-65).

Although there is no explicit disclosure in either Lin or Sakuma et al. that the colorant which is encapsulated in Sakuma et al. is substantially the same color as the pigment disclosed by Lin, it is within the skill level of one of ordinary skill in the art to recognize that a single ink should be made from one color in order to enhance the color strength and image density of the ink and that using a coloring material and pigment with substantially different colors would result in an ink having uneven color, low color strength, and poor image density.

Further, since the combination of Lin in view of Sakuma et al. disclose an aqueous ink containing the same colorant as presently claimed, it therefore would have been obvious to one of ordinary skill in the art that the ink would intrinsically provide an image whose optical density is equivalent to that formed by an ink comprising pigment in the same amount, and thus, one of ordinary skill in the art would have arrived at the claimed invention.

In light of the motivation for using resin encapsulating a coloring material disclosed by Sakuma et al., it therefore would have been obvious to one of ordinary skill in the art to use this resin encapsulated colorant in the ink of Lin in order to produce an ink with low bleed through, high color strength, and high image density or improved waterfastness and fixation, and thereby arrive at the claimed invention.

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10. Claims 7, 16, 25, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin in view of Sakuma et al. as applied to claims 1-6, 8-10, 12-15, 17, 19-24, 26-28, 30-33, 35, and 59 above, and further in view of Sacripante et al. (U.S. 6,025,412).

The difference between Lin in view of Sakuma et al. and the present claimed invention is the requirement in the claims of resin encapsulated colorant wherein the resin contains anionic or cationic groups.

Sacripante et al., which is drawn to ink composition, discloses the use of polymer encapsulated colorant wherein the polymer has attached hydrophilic groups which include anionic and cationic groups (col.4, lines 36-51). The motivation for using such a resin encapsulated colorant is to produce an ink with excellent waterfastness and high print quality (col.10, lines 7-8).

In light of the motivation for using specific resin encapsulated colorant disclosed by Sacripante et al. as described above, it therefore would have been obvious to one of ordinary skill in the art to use this resin encapsulated colorant in the ink of Lin in order to produce an ink with excellent waterfastness and high print quality, and thereby arrive at the claimed invention.

11. Claims 11, 18, 29, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin in view of Sakuma et al. as applied to claims 1-6, 8-10, 12-15, 17, 19-24, 26-28, 30-33, 35, and 59 above, and further in view of Hotomi et al. (U.S. 5,376,169).

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The difference between Lin in view of Sakuma et al. and the present claimed invention is the requirement in the claims of microcapsules.

Hotomi et al., which is drawn to ink composition, discloses the use of microcapsule particles which contain dye or pigment (col.3, lines 54-57) in order to produce an ink with satisfactory color density, good dispersability, and no ink-emitting trouble (col.3, lines 50-53).

In light of the motivation for using microcapsules disclosed by Hotomi et al. as described above, it therefore would have been obvious to one of ordinary skill in the art to use microcapsules in the ink of Lin in order to produce an ink which has satisfactory color density, good dispersability, and no ink-emitting trouble, and thereby arrive at the claimed invention.

12. Claims 1-10, 12-17, 19-28, 30-35, and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (U.S. 5,851,274) in view of Tsutsumi et al. (U.S. 6,031,019).

Lin discloses an aqueous ink composition which contains pigment such as carbon black which is present with or without a dispersant wherein the pigment is dispersed in an aqueous medium. When the carbon black is chemically modified with anionic or cationic functional groups, it is dispersed without a dispersant. If the carbon black is not chemically modified, a dispersant is necessary. The dispersant contains hydrophilic anionic and cationic functional groups (col.11, lines 54-62, col.13, lines 17, and col.14, lines 42-45). Lin also discloses an ink jet ink printed using an ink jet printer (col.5, line 64 and col.6, lines 22-26). An ink jet printer, as is well known to one of ordinary skill in the art, contains cartridges to hold the ink, and therefore

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would have been obvious to one of ordinary skill in the art that Lin discloses an ink cartridge containing the above described ink. Evidence to support this position is found in col.3, line 20 of Lin which discloses that ink jet printers do indeed utilize cartridges which hold the ink prior to printing.

The difference between Lin and the present claimed invention is the requirement in the claims of a resin encapsulating a coloring material.

Lin discloses that the ink contains mixtures of colorants, but does not explicitly disclose the use of resin encapsulating a coloring material.

Tsutsumi et al., which is drawn to an aqueous ink jet ink composition, disclose the use of polymer encapsulated dye or pigment wherein the resin is obtained from cationic or anionic monomers (col.3, line 65-col.4, line 12, col.4, lines 20-22, and col.6, lines 31-65) in order to produce an ink with improved waterfastness and anti-feathering properties (col.2, lines 41-43).

Although there is no explicit disclosure in either Lin or Tsutsumi et al. that the colorant which is encapsulated in Tsutsumi et al. is substantially the same color as the pigment disclosed by Lin, it is within the skill level of one of ordinary skill in the art to recognize that a single ink should be made from one color in order to enhance the color strength and image density of the ink and that using a coloring material and pigment with substantially different colors would result in an ink having uneven color, low color strength, and poor image density.

Further, since the combination of Lin in view of Tsutsumi et al. disclose an aqueous ink containing the same colorant as presently claimed, it therefore would have been obvious to one of

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ordinary skill in the art that the ink would intrinsically provide an image whose optical density is equivalent to that formed by an ink comprising pigment in the same amount, and thus, one of ordinary skill in the art would have arrived at the claimed invention.

In light of the motivation for using resin encapsulating a coloring material disclosed by Tsutsumi et al., it therefore would have been obvious to one of ordinary skill in the art to use this resin encapsulated colorant in the ink of Lin in order to produce an ink with low bleed through, high color strength, and high image density or improved waterfastness and fixation, and thereby arrive at the claimed invention.

13. Claims 11, 18, 29, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin in view of Tsutsumi et al. as applied to claims 1-10, 12-17, 19-28, 30-35, and 59 above, and further in view of Hotomi et al. (U.S. 5,376,169).

The difference between Lin in view of Tsutsumi et al. and the present claimed invention is the requirement in the claims of microcapsules.

Hotomi et al., which is drawn to ink composition, discloses the use of microcapsule particles which contain dye or pigment (col.3, lines 54-57) in order to produce an ink with satisfactory color density, good dispersability, and no ink-emitting trouble (col.3, lines 50-53).

In light of the motivation for using microcapsules disclosed by Hotomi et al. as described above, it therefore would have been obvious to one of ordinary skill in the art to use

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microcapsules in the ink of Lin in order to produce an ink which has satisfactory color density, good dispersability, and no ink-emitting trouble, and thereby arrive at the claimed invention.

14. Claims 1-5, 7, 9-10, 12-17, 19-23, 25, 27-28, 30-35, and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsutsumi et al. (U.S. 6,031,019) in view of either Johnson et al. (U.S. 5,803,959) or Tsang et al. (U.S. 5,886,065).

Tsutsumi et al. disclose an aqueous ink jet ink composition which contains a colorant such as a pigment encapsulated into polymer particles wherein the polymer encapsulated colorant is dispersed in an aqueous medium. It is further disclosed that not all the colorant present in the ink is encapsulated into the polymer. Thus, it is clear that the ink of Tsutsumi et al. contains pigment and resin encapsulating a coloring material as presently claimed. It is further disclosed that the ink contains a dispersant (col.3, line 65-col.4, line 12, col.4, lines 20-22, and col.6, lines 31-65).

It is noted that Tsutsumi et al. disclose an ink jet ink printed using an ink jet printer (col.1, lines 4-5). An ink jet printer, as is well known to one of ordinary skill in the art, contains cartridges to hold the ink, and therefore would have been obvious to one of ordinary skill in the art that Tsutsumi et al. discloses an ink cartridge containing the above described ink. Evidence to support this position is found in col.15, lines 40-42 of Tsutsumi et al. which discloses that the ink jet printer does indeed utilize cartridges which hold the ink prior to printing.

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The difference between Tsutsumi et al. and the present claimed invention is the requirement in the claims of (a) self-dispersing pigment and (b) no explicit disclosure that the encapsulated and non-encapsulated colorant have the same color.

With respect to difference (a), Tsutsumi et al. generically disclose the use of pigments.

Johnson et al. disclose the use of a self-dispersing pigment suitable for use in ink jet inks wherein the pigment comprises carbon black having at least one attached cationic group or at least one anionic groups wherein the motivation for using such a pigment is that it produces an ink with good waterfastness (col.2, lines 51-56, col.5, line 10-col.6, line 26, and col.8, lines 40-42).

Alternatively, Tsang et al., which is drawn to ink jet ink, disclose the use of carbon black treated with either anionic group or cationic groups in order to produce an ink which is both waterfast and non-flocculating (col.2, lines 45-49 and col.5, lines 16-33).

Further, it is noted that since the combination of Tsutsumi et al. in view of either Johnson et al. or Tsang et al. disclose an aqueous ink containing the same colorant as presently claimed, it therefore would have been obvious to one of ordinary skill in the art that the ink would intrinsically provide an image whose optical density is equivalent to that formed by an ink comprising pigment in the same amount.

In light of the motivation for using self-dispersing pigment disclosed by either Johnson et al. or Tsang et al. as described above, it therefore would have been obvious to one of ordinary

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skill in the art to use such pigment in the ink jet ink of Tsutsumi et al. in order to produce a stable ink, and thereby arrive at the claimed invention.

With respect to difference (b), given that the ink contains colorant which is encapsulated in a resin and that some of the same colorant is present in the ink in non-encapsulated form, it therefore would have been obvious to one of ordinary skill in the art that the encapsulated and non-encapsulated colorant would have the same color, and thereby arrive at the claimed invention.

15. Claims 6, 11, 18, 24, 29, and 36 rejected under 35 U.S.C. 103(a) as being unpatentable over Tsutsumi et al. in view of either Johnson et al. or Tsang et al. as applied to claims 1-5, 7, 9-10, 12-17, 19-23, 25, 27-28, 30-35, and 59 above, and further in view of Yui et al. (U.S. 5,948,155) and Hotomi et al. (U.S. 5,376,169).

The difference between Tsutsumi et al. in view of either Johnson et al. or Tsang et al. and the present claimed invention is the requirement in the claims of (a) specific type of dispersant and (b) microcapsules.

With respect to difference (a), Yui et al. disclose the use of dispersants which have anionic or cationic functional groups in order to improve dispersion stability (col.5, line 42-col.6, line 28). Using this specific dispersant will produce an ink with good disperability, good image quality, good fixation, and reliability (col.2, lines 16-20).



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In light of the motivation for using specific types of dispersant disclosed by Yui et al. as described above, it therefore would have been obvious to one of ordinary skill in the art to use this dispersant in the ink of Tsutsumi et al. in order to produce an ink with good dispersability, good image quality, good fixation, and reliability and thereby arrive at the claimed invention.

With respect to difference (b), Hotomi et al., which is drawn to ink composition, discloses the use of microcapsule particles which contain dye or pigment (col.3, lines 54-57) in order to produce an ink with satisfactory color density, good dispersability, and no ink-emitting trouble (col.3, lines 50-53).

In light of the motivation for using microcapsules disclosed by Hotomi et al. as described above, it therefore would have been obvious to one of ordinary skill in the art to use microcapsules in the ink of Tsutsumi et al. in order to produce an ink which has satisfactory color density, good dispersability, and no ink-emitting trouble, and thereby arrive at the claimed invention.

#### **Response to arguments**

16. Applicants' arguments with respect to the Zou et al. (U.S. 5,622,548) and Osumi et al. (U.S. 5,976,233) have been considered and are moot in view of the discontinuation of these references as applied against the present claims.

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17. Applicant's arguments filed 6/13/01 have been fully considered but, with the exception of arguments relating to the Zou et al. and Osumi et al. references, they are not persuasive.

Specifically, the applicant argues that:

(a) There is no disclosure in Sakuma et al. of the effect which can be obtained by applying just resin encapsulated colorant to Lin.

(b) There is no disclosure in Sakuma et al. of the advantages present in the instant invention from combination of self-dispersing pigment and resin encapsulated colorant such as improved rub resistance.

(c) Neither Sacripante et al. or Hotomi et al. disclose ink containing both self-dispersing pigment and resin encapsulated colorant as presently claimed.

With respect to argument (a), applicants argue that since Sakuma et al. disclose an ink comprising resin encapsulated colorant as well as physical properties which must be met by the ink, i.e. surface tension, viscosity, and average particle size, there is no disclosure of the effects which can be obtained by applying just resin encapsulated colorant. However, it is noted that col.20, lines 50-57 of Sakuma et al. disclose that the resin encapsulated colorant itself prevents the ink from blurring and improves the waterfastness and fixation of the ink.

With respect to argument (b), it is noted that "obviousness under 103 is not negated because the motivation to arrive at the claimed invention as disclosed by prior art does not agree



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with appellant's motivation", In re Dillon, 16 USPQ2d 1897 (Fed. Cir. 1990), In re Tomlinson, 150 USPQ 623 (CCPA 1966). Further, given that the combination of Lin and Sakuma et al. discloses an ink comprising the combination of self-dispersing pigment and resin encapsulated colorant as presently claimed, it would have been reasonable for one of ordinary skill in the art to expect that such combination would also intrinsically possess the same properties as found in the present invention including rub resistance.

With respect to argument (c), it is agreed that neither Sacripante et al. or Hotomi et al. disclose an ink containing both self-dispersing pigment and resin encapsulated colorant as presently claimed. However, it is noted that both Sacripante et al. and Hotomi et al. are used as teaching references and therefore, it is not necessary for these secondary references to contain all the features of the presently claimed invention, In re Nievelt, 482 F.2d 965, 179 USPQ 224, 226 (CCPA 1973), In re Keller, 624 F.2d 413, 208 USPQ 871, 881 (CCPA 1981). Rather Sacripante et al. and Hotomi et al. each teach a certain concept, namely, specific types of resin encapsulated colorant and microcapsules, respectively, and in combination with the primary reference, discloses the presently claimed invention. If the secondary reference contained all the features of the present claimed invention, it would be identical to the present claimed invention, and there would be no need for secondary references.

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18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie Shosho whose telephone number is (703) 305-0208. The examiner can normally be reached on Mondays-Thursdays from 7:00 am to 4:30 am. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on (703) 306-2777. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3599.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

*CS.*

Callie Shosho  
8/28/01

*Vasu Jagannathan*  
VASU JAGANNATHAN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700